

## **DESCRIPTION OF THE PROPOSED ACTION**

The following sections describe the 2005 Wheeler to Webster Geographic Area Proposal Environmental Assessment (GAP) for natural gas development by Williams Production RMT Company (Williams). The alternatives were considered, but eliminated and the No Action Alternative was also discussed.

### **PROPOSED ACTION**

The GAP area is roughly defined on the west by County Road 215 and Wheeler Gulch, on the north by the rim of the Roan Cliffs that border the Colorado River valley, on the east by Webster Mesa, and on the south by I-70. The GAP encompasses approximately 22,500 acres, 15,000 of which are under the jurisdiction of the BLM. Within the GAP boundary, 12 new (but previously approved) surface locations and 47 existing surface locations will be utilized to access a total of 213 bottom hole locations for natural gas wells, all to be directionally drilled from existing locations and new well pads. It's important to note that this proposed action will create no additional new ground disturbance than was already analyzed in the original Wheeler to Webster GAP EA.

The GAP is intended to provide a two to three year look at an overall development scenario instead of a case-by-case submittal of Applications for Permit to Drill (APDs). The intent of the GAP process is to address site-specific and cumulative environmental impacts associated with oil and gas development within a defined "Geographic Area." In addition, the GAP process was created to propose mitigation for potential impacts to environmental resources, such as wildlife habitat and visual aesthetics that may occur within discrete ecosystems. Mitigation must be consistent with the conditions contained in the Roan Plateau Planning Area Resource Management Plan Amendment and Environmental Impact Statement.

The result of the GAP is a reasonable foreseeable development (RFD) scenario proposed by the operator given the current market conditions and demand for natural gas, other constraints of the company, and by environmental constraints imposed by the BLM. The major elements of the GAP are presented below under Development (Construction/Drilling/Completion), Production (Operation and Maintenance), and Abandonment. The proposed elements contain a standard surface use plan for gas well development. All surface use and drilling operations are outlined in the "Williams Master APD – Standard Operating Practices" document. This document contains the 10 point drilling plan, 13 point surface use plan, and the Conditions of Approval.

### **Development (Construction/Drilling/Completion)**

Williams proposes to drill up to 213 natural gas wells within the GAP during a two-to three -year program beginning in 2005. The plan proposes to drill these 213 new wells from up to 12 previously approved new surface locations plus 47 existing well pads for a total of 59 well pads. The wells will all be directionally drilled. All of the 59 well pads would have multiple well bores. Of the 213 proposed wells, 19 would be based on 40-acre bottom hole spacing, 38 would be based on 20-acre bottom hole spacing, and 156 would be based on 10-acre bottom hole spacing patterns. The Colorado Oil and Gas Conservation Commission (COGCC) approved 10-acre bottom hole spacing in portions of the Piceance Basin through orders issued in 2003. A Memorandum of Understanding exists between the COGCC and the BLM that signifies BLM's

acceptance of the spacing order and to develop the leases addressed in this EA on a 10-acre density (down hole) basis.

All of the 213 proposed wells would be drilled on existing Williams leases. A combination of the following development scenarios are proposed:

- Forty-seven existing well pads to obtain 180 bottom hole locations;
- Twelve new well pads to obtain 33 bottom hole locations; and
- Multi-well locations where up to ten additional wells would be drilled from a single well pad.

If fully developed, this proposal would result in 213 new bottom hole locations, but as previously stated, only twelve new surface locations would be created. Williams expects to drill up to 30 of the proposed wells in 2005 and an equal or greater number per year in subsequent years.

As of February 21, 2005, approximately 483 wells (177 Federal wells, 306 Fee wells) already exist within the GAP boundary. These 483 existing wells share well pads and utilize only 265 total surface locations, of which 75 are on federal surface and 190 are on fee surface

It is possible that Williams could drill fewer wells than those described in the planning and analysis process because of geologic uncertainties and market uncertainties.

New wells would be drilled to an average depth of 6,500 to 9,000 feet. The typical natural gas well in this GAP would require about 15 days to drill and 30 days to complete. Pads with multiple well bores would be occupied for a more extended period of time, depending on the number of well bores. Multiple well bores from a single pad would be drilled consecutively and completed during one period of development for that pad. Multiple wells would be drilled from both the 47 existing and the 12 new well pads to minimize surface disturbance.

Surface soils would be stripped and stockpiled on the pad. Excavation of pits and any cut slopes would be conducted by heavy equipment. All pits, cellars, rat holes, and other bore holes unnecessary for further lease operations, excluding the reserve pit, would be backfilled immediately after the drilling rig is released to conform with surrounding terrain.

A minimum of two feet of free board would be maintained in the reserve pit, between the maximum fluid level and the top of the berm. These pits would be designed to exclude all surface runoff. Reserve pit fluids would be back filled within one year of construction or at the end of the succeeding summer (August 31) to allow for evaporation of fluids, unless an alternative method of disposal is approved. The backfilling of the reserve pit would be done in such a manner that the mud and associated solids will be confined to the pit and not squeezed out and incorporated in the surface materials. There would be a minimum of three feet of cover (overburden) on the pit. When work is complete, the pit area would support the weight of heavy equipment without sinking.

Approximately 1.75 miles of new access roads would be constructed to access the 12 pads (all new roads and pads were previously approved in the 2002 WWGAP EA) with an average width of 30 feet. New pipelines and flow lines would be buried within existing or new access roads. At existing well pads where two or more new wells are proposed, additional 3- to 4-inch diameter flow lines would most likely be added beneath access roads. The lines would be buried to a minimum four feet from ground surface to top of pipe.

Williams anticipates that approximately 1.5 to 2.5 acres of surface terrain would be disturbed to create a new well pad. The exact amount of surface disturbance would vary on an individual basis depending on topography and number of bottom hole locations targeted. Subsequent reclamation would mitigate the disturbed area to approximately 0.5 acre after well development. Well site reclamation would be performed and monitored in accordance with the Standard Surface Use Plan in the Master APD. All cut slopes associated with pad construction would be “step cut” and left rough to provide a seed catchment surface. Cut slopes required for pad construction would not be steeper than 1.5:1.

Existing evaporation ponds would be used for the treatment of produced water. Due to the fact that Williams is currently recycling the majority of their produced water, the ponds have an indefinite life and should not have to be enlarged for this GAP.

## **Production (Operation and Maintenance)**

A typical Williams well location would consist of a wellhead, dehydration unit, 200-barrel capacity aboveground stock tank, and an 80-barrel capacity partially buried water tank. Multi-well locations would share production equipment whenever feasible to minimize surface occupancy/disturbance. Production equipment would be painted to match the surrounding terrain and minimize visual impact. The equipment would be fenced within a 45-foot by 25-foot area to prevent contact with wildlife/livestock. Flow lines would be buried beneath access roads whenever possible. Telemetry equipment would be utilized to remotely monitor well conditions, to minimize traffic to and from the well locations. Automated tank gauging would be employed to minimize the risk of spills. Centralized compression would take place, thus avoiding the need for onsite well compressors and minimizing the area impacted by compressor noise.

Produced water could be confined to the reserve pit for a period of 90 days after initial production. A permanent steel tank would be installed in the ground next to the production facilities to temporarily contain produced water for the duration of operation of the well. Produced water at well pads would be collected by tanker trucks and disposed of at one of two State-approved central (existing) evaporation ponds owned by Williams. All cuttings, drilling fluids, and chemicals would be contained in the reserve pit.

After completion activities, Williams would reduce the size of the well pad to the minimum surface area needed for production facilities, while providing for reshaping and stabilization of cut and fill slopes. The cut and fill slopes would be reshaped to a maximum 3:1 slope, where possible. All disturbed areas not necessary for drilling and producing operations would undergo the following reclamation standards after completing dirt work and operations.

Some locations will require special reclamation practices such as mulching, the method and time of planting, the use of different plant species, soil analysis to determine the need for fertilizer, fertilizing, seed-bed preparation, contour furrowing, watering, terracing, water barring, and the replacement of topsoil. Areas being reclaimed would be fenced to exclude livestock for the first two growing seasons or until the seeded species have established. Noxious weeds that may be introduced due to soil disturbance and reclamation would be treated by methods to be approved by the BLM.

The access roads would be inspected and maintained on a biannual basis, at a minimum, to include such items as:

- Road surface grading;
- Relief ditch, culvert cleaning and cattle guard cleaning;
- Erosion control measures for cut and fill slopes and all other disturbed areas;
- Road closures in periods of excessive soil moisture to prevent rutting caused by vehicular traffic; and
- Road and slope stabilization measures as required until final abandonment and rehabilitation.

Periodically, a workover or recompletion on a well may be required to ensure that efficient production is maintained. Workovers can include repairs to the well bore equipment (casing, tubing, rods, or pump), the well head, or the production facilities. These repairs would usually be completed in several days per well, during daylight hours. The frequency for this type of work cannot be accurately projected because workovers vary well by well; however, an average work time may be one workover per well per year for a period of seven days. In the case of multi-well pads, space for equipment would be usually limited to the “in use” (i.e., disturbed) area of the surface location, although it is possible that interim reclamation would be affected. In the case of a recompletion, where casings are worked on or valves and fittings would be replaced to stimulate production, a reserve pit may have to be constructed. This could have an effect on interim reclamation efforts.